



# The Original Roll-Packer RP 7700 Jumbo

## Bergmann „The Original“



### Idea

The Roll-Packer type RP 7700 is an invention of the company Bergmann. In order to work with this machine it is only necessary to place a simply open roll of container of almost any size (minimal safety height: 1900mm) in front of it. After filling the ground the saving of disposal costs can start! The philosophy thereby is, to compact the waste and the recyclable material efficiently where they come up. A heavy, special equipped compaction drum compacts big, bulky waste in an open container to the minimum of its original volume.

### Use

The Roll-Packer 7700 is particularly suited for bulky and voluminous waste, such as wooden boxes, pallets, big cardboard, scrap, green waste, etc.

**Typical utilization** on recycling depots, in supermarkets, in retailing-/wholesales chains and industrial companies of every branch.

The drive mechanism of the compaction drum takes place through the hydraulic motor inside the drum, which is provided by a hydraulic system. The compaction operations can take place automatically or manually. The system is steered in a way, so that the drum rolls forward and backward in constant change, whereby the waste will be „steamrolled“ in layers.

The Roll-Packer can be used on open containers up to a length of 7m. The container will not be damaged by the Roll-Packer.

### Safety

The Bergmann-Roll-Packer RP 7700 is **TÜV-GS** certified and corresponds to the European Machinery Directive CE. Moreover, the machine is fitted with an additional security key switch for maintenance and cleaning work. The electrical control system has a safety relais whereby even in the case of a disturbance of the solid PLC-control the emergency Stopp function is always guaranteed.



## Functional principle

As a member of the Bergmann **Roll-Packer-Family** the RP7700 is constructed for the stationary use at an open container. A heavy, special equipped compaction drum reduces even big, bulky waste in an open container in a short time to the minimum of its original volume.

## Easy handling

At first, after the roll-off-container is positioned in front of the RP 7700, the container has to be filled. The container bottom should be covered completely, so that the spikes cannot do harm there.



## Compaction in layers

In a second step the machine will be turned on. The drum sinks and starts rolling forward and backward. In the true sense of the word the material will be „**steamrolled**“. Thereby an enormous compaction result will be obtained.



## Continuous filling

The container can be filled continuously with material even if the drum is rolling.



## More than 30 years of experience!

The hydraulical system, the individual gearbox, the strong arm hinges consisting of high-quality materials as well as the electrical steering are based on the experience of more than 30 years. This experience is attributed to the different operating ranges and uses of our customers, which are reflected in all parts of the serial machine. Additionally, the possible additional accessories are based on the **longtime experience!**



safety grids all around shield the danger zone

## Compaction operation

Low-maintenance hydraulical motors inside the compaction drum, which are provided by the hydraulical system, ensue driving and rotation of the drum. The approx. 1,8 t heavy drum obtains an enormous compaction result by means of the **high wear-resistant spikes**. For all kinds of material different drums with different spikes are available.

## Environment:

An oil level indicator and a overload protection guarantee a safety operations.

## Safety grids

Safety grids prevent entering the danger zone of the machine.



not activated limit switch bar



activated limit switch bar

## Container attendance switches

Two laterally mounted limit switches prevent the implementing of the RP 7700 without a container. **SAFETY!** Only if a container is present the limit switches release the compaction operations.

## Operation

The easily accessible control box, which is mounted externally, is equipped with the controls for time or continuous operations. The compaction intervals are variable adjustable. The engine unit is **easy accessible** for maintenance work. The hydraulic hoses are extra protected with special hoses and a 4mm steel protection plate.



clear control panel

## Adjustment of the compaction way -

### NEW! without tools!

The adjustment of the compaction way is easy and comfortable and effected by means of the control panel. As a result the adaption of the way for different container lengths is possible with only a few handholds. In this way the risk of danger is reduced as well.

## Technical data of the Jumbo-Roll-Packer RP 7700

<p><b><u>Hydraulic power unit</u></b></p> <p>Driving power</p> <p>Compaction unit      5,5 kW / 1.500 U/min</p> <p>Operating pressure    up to 210 bar</p> <p>Speed of the drum     approx. 7 U/min</p> <p>Mount of hydr. oil     110 litre</p> <p>Hydraulic oil          HLP acc. to DIN 51 524, part 2</p> <p>Viscosity                from 46 mm<sup>2</sup>/s at 40°C</p> <p>Temperature range    -10°C to +60°C</p> <p>Oil cooler                110 W</p> <p><b><u>Gear</u></b></p> <p>Amount of gear oil     drum gear: 6,0 litre</p> <p>Gear oil                 CLP acc. to DIN 51 517, part 3</p> <p>Viscosity                from 320 mm<sup>2</sup>/s at 40°C</p> <p>Temperature range    -10°C to +60°C</p>	<p><b><u>approx. dimensions (without container)</u></b></p> <p>Width of the machine   2.800 mm</p> <p>Height of the machine   6.600 mm</p> <p>Length of the machine   4.900 mm</p> <p>Diameter of the drum    ca. 1.150 mm</p> <p>Width of the drum        ca. 1.800 mm</p> <p>Container heights        1.900 mm - 2.700 mm optional up to 3100 mm</p> <p>Compaction way         approx. 7.000 mm, variable adjustable</p> <p><b><u>Electrical data</u></b></p> <p>Electr. connection      customized</p> <p>Input voltage             220-240 V / 380-415 V</p> <p>Frequency                50 Hz</p> <p>Control voltage          24 V</p> <p>Preliminary fuse on site 3 x 25 A</p> <p>Protection type          IP 44 acc. to DIN 40 050</p> <p><b><u>Further information</u></b></p> <p>Movement                manually with spec. equipment</p> <p>Noise level                approx. 68 dB(A) acc. to DIN ISO 45635 (5m distance)</p> <p>Weight of the drum      approx. 1.800 kg</p> <p>Total weight             approx. 3.600 kg</p>
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Subject to technical modifications.

## References

Here they know how much the BERGMANN-Roll-Packer economizes!

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|---|---|
| <ul style="list-style-type: none"> <li>• <b>BASF Münster, (D)</b></li> <li>• <b>BMW Landshut, (D)</b></li> <li>• <b>Lufthansa Frankfurt, (D)</b></li> <li>• <b>METRO Gruppe Düsseldorf, (D)</b></li> <li>• <b>Daewoo Trucks, (N)</b></li> <li>• <b>Sellbergs Jönköping, (S)</b></li> <li>• <b>Coca Cola Sverige, (S)</b></li> <li>• <b>Bosch Siemens, St. Petersburg (RUS)</b></li> <li>• <b>Saint Gobain, (F)</b></li> </ul> | <ul style="list-style-type: none"> <li>• <b>Citroen, (F)</b></li> <li>• <b>Ford Gent, (B)</b></li> <li>• <b>Tambour LTD Akko, (IL)</b></li> <li>• <b>Leroy Merlin Sevilla, (E)</b></li> <li>• <b>North Berwick Civic Amenity Site, (GB)</b></li> <li>• <b>East Midlands Waste Machiners, (GB)</b></li> <li>• <b>East Renfrewshire Council, (GB)</b></li> <li>• <b>Dynamic Waste San Jose, (USA)</b></li> <li>• <b>Transpacific Superior, (AUS)</b></li> </ul> |
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## Compaction results acc. to customer`s indication

	<u>type of waste</u>	<u>without Roll-Packer</u>	<u>with Roll-Packer</u>	<u>savings of disposal trips</u>
	chipboard	approx. 1,2 t	approx. 5,2 t	76 %
	cardboard	approx. 0,9 t	approx. 4 t	75 %
	residual waste	approx. 6 containers are necessary	approx. 3 containers are necessary	50 %
	timber, pallets	approx. 2,5 t	approx. 8 t	68 %
	metal	approx. 5 containers are necessary	approx. 2 containers are necessary	60 %
	green waste	approx. 2,5 t	approx. 7 t	64 %



Idea & fabrication: Roll-Packer from 1981!



The first „JUMBO“ Roll-Packer as of 1986!



The first Roll-Packer  
Traversing System  
year of manufacture  
1989!



Prototype of  
the patented  
Mobil Jumbo®  
1999-2000!  
„left picture“

## History of the BERGMANN Roll-Packer

For more than 30 years BERGMANN produces the system of the rolling compaction drum in an open container. Idea, conception and development are attributed to the company founder Heinrich Bergmann.

The implementation and the **patent application** (no. 0042580) happened **in the year 1981**. At that time the lifting of the drum had to be done with a hydraulic hand operated pump!

Due to the variety of possible applications (e.g. for domestic waste, cardboard packaging, foils, right up to one-way pallets and bulky waste) the first Roll-Packer „Jumbo“ was designed in 1986. Since then its success model was of course extended, TÜV-GS certified and it is part of Bergmann's product range up to the present day.





Due to increased customer wishes for more flexibility the first on rails mounted Roll-Packer „Traversing System“ was constructed in the year 1989.

**1999/2000** the first prototype of the Mobil Jumbo® was built and **patented** (no. 1046490).





Up to the present day the family of the Roll-Packer will be improved, further developed and above all customer wishes will be followed up.











Today - the RP 7700 with TÜV-GS-seal of approval!



EDV-Code	Description	Scope of delivery
<p>40401361</p> 	<p><b><u>Fixing kit for the ground</u></b></p> <p>Delivery of a flexible fixing kit for the fixing of the machine on the ground. The fixing avoids a movement of the machine during container change and reduces the transmission of vibrations to the construction.</p> <p>The fixing takes place in front or in the rear on the side bars of the machine.</p> <p><b><u>PLEASE NOTE:</u></b> The ground should be flat and for the fixing concreted.</p>	<p>2 pcs. heavy duty studs</p> <p>2 pcs. steel discs</p> <p>4 pcs. rubber washer</p>
<p>40401415</p> 	<p><b><u>Drum for cardboard (coils + studs)</u></b></p> <p>Special drum for the optimized compaction of cardboard packaging or similar material.</p> <p>The drum is equipped with 12 coils and also 12 studs, whereby the last mentioned ones are affixed lengthways to the drum direction.</p>	<p>special drum</p>
<p>40401416</p> 	<p><b><u>Drum for cans</u></b></p> <p>Special drum for the optimized compaction of tinplate cans.</p> <p>The drum is equipped with 12 cross struts.</p>	<p>special drum</p>
<p>40401417</p> 	<p><b><u>Pyramid drum</u></b></p> <p>Special drum for the optimized compaction of extremely stable wooden beams.</p> <p>The drum is equipped with pyramid-shaped steel prongs.</p> <p>Additionally, the drum is suitable for the compaction of bulky cardboard because the cross struts impede the skewering of the material</p>	<p>special drum</p>








EDV-Code	Description	Scope of delivery
<p>40401418</p> 	<p><b><u>Special drum with cleaning device</u></b></p> <p>Special equipped drum with cleaning device which avoids that easy spiking material as cardboard will stick on the drum. The width of the drum is approx. 1.800mm. The compaction weight will be increased by approx. 200kg.</p>	<p>special drum cleaning device</p>
<p>40401420</p> 	<p><b><u>Drum stripping device</u></b></p> <p>A robust stripping device avoids that the material that has to be compacted sticks on the drum.</p>	<p>drum stripping device</p>
<p>40401436</p> 	<p><b><u>Vandalism protected keyboard</u></b></p> <p>Control panel vandalism-protected by a lockable robust metal flap, that prevents unauthorized operation of the machine.</p> <p>If the door is closed the emergency stop button is activated which means that the machine can only start with an open door.</p>	<p>metal flap padlock</p>
<p>404018414</p> 	<p><b><u>Safety light grid</u></b></p> <p>Safety light grid for the additional installation on a ramp or the like. After ensued contact the photoelectric cell, which is integrated in the control system of the RP 7700, turns off the machine.</p>	<p>safety light grid holder mountings</p>

EDV-Code	Description	Scope of delivery
<p>40401441</p> 	<p><b><u>Roll-Packer for containerheights up to 3.100 mm: Support frame</u></b></p> <p>If the compaction should take place in containers with heights greater than 2.700 mm, it is possible to adapt the construction accordingly. Thereby the support frame will be increased up to 3.100 mm</p> <p><b><u>Please note:</u></b> The needed headroom for the operation of the machine is 7.100 mm.</p>	<p>special construction of the ground</p>
<p>40401498</p> 	<p><b><u>Curved checking mirror</u></b></p> <p>The curved checking mirror enables the insight in the container from the ground. Thereby it is possible to make a short safety check and control the filling level of the container before starting the operation, For that a stand will be mounted next to the machine. Thereon the mirror will be mounted in a height of approx. 3.500 mm.</p>	<p>mirror with D = 60cm incl. hinge and pipe</p> <p>clamp</p> <p>stand for mirror</p> <p>4 pcs. heavy-duty dowels</p>
<p>40401421 40401422</p> 	<p><b><u>Hydraulic oil heating</u></b></p> <p><u>Hydraulic oil heating 1000 W at 400 V:</u> The heating will be placed on the ground of the hydraulic tank and ensures that the temperature of the hydraulic oil amounts to min. 22°C.</p> <p><u>Hydraulic oil heating 1000 W at 230 V:</u> as stated above, yet min. 17°C</p>	<p>spiral heating with magnet foot</p> <p>temperature sensor and cable gland</p> <p>glass tube protection</p>
<p>40401419</p> 	<p><b><u>Hydraulic power pack right-hand side</u></b></p> <p>If one stands on the backside of the RP 7700, the hydraulic power pack and the keyboard will be mounted on the right side.</p>	<p>special design frame</p>

EDV-Code	Description	Scope of delivery
<p>50000894</p> 	<p><b><u>Bio-hydraulic oil</u></b></p> <p>As standard an oil lack switch is built-in which turns off the machine when oil leaks out. In areas where the groundwater needs to be protected particularly, it is advisable to use bio-hydraulic oil nevrtheles.</p>	<p>bio-hydraulic oil</p>
<p>40401356</p> 	<p><b><u>Signal via flashing light</u></b></p> <p>Optical signal when e.g. the fullsignal has been released or when too little oil is in the hydraulic tank. The signal persists as long as the input signal will be interrupted by power interruption respectively by pushing the emergency stop button.</p> <p>Signal actuators such as the full signal are not included in this set.</p>	<p>flashing light</p> <p>various electrical components</p>
<p>40401411</p> 	<p><b><u>Additional remote control with 5m cable</u></b></p> <p>In addition to the standard control panel on the machine, a remote control inc. 5m cable and a metal protection case will be delivered. This control panel is tapped directly in the control cabinet. The machine can be operated via both control panels.</p>	<p>control panel</p> <p>robust metal protective housing</p> <p>5m cable incl. protective hose</p> <p>electrical components</p>
<p>40401412</p> 	<p><b><u>Automatic lifting of the drum</u></b></p> <p>After the programmed compaction time is over the drum lifts automatically and the machine turns it-seld off. By means of a pendulum it is ensured that the drum can only be lifted in vertical position.</p>	<p>time relay</p> <p>electrical components</p>

EDV-Code	Description	Scope of delivery
40401439 	<p><b><u>Additional emergency stop button</u></b></p> <p>A second emergency stop button will be mounted on the opposite side of the hydraulic aggregate on the safety guards of the machine. By means of this additional security measure a more quickly intervention of a third in dangerous situations is possible.</p>	<p>emergency stop button incl. housing</p>
40401519	<p><b><u>Shut off by limit switch</u></b></p> <p>Limit switch for stopping the machine after the compaction drum has been lifted out of the container. The limit switch is mounted on a cam disk on the joint of the stem. If the cranked arm pushes against the limit switch, the machine turns itself off. By means of this control system the lifting height can be limited.</p>	<p>limit switch with cam disk</p> <p>various electrical components</p>
40401781	<p><b><u>Potential-free contact</u></b></p> <p>Electrical extension for transferring a state from or to the machine, e.g. starting the Roll-Packer due to the signal on an external control „conveyer has started“.</p>	<p>potential-free contact</p>
40401784 	<p><b><u>Prearrangement for remote control</u></b></p> <p>A 16-pin plug will be mounted externally on the aggregate. The exact position can be determined by the customer. All advice and functions of the installed control panel will be transferred parallel to the plug.</p>	<p>1 pc. 16-pin plug</p> <p>various electrical components</p>

EDV-Code	Description	Scope of delivery
<p>40401836</p> 	<p><b><u>75 % full signal via limit switch</u></b></p> <p>Through an electrical signal, which will be caused by a limit switch, a lamp on the control cabinet flashes. This signalled that the container is at 75% full.</p> <p><b><u>PLEASE NOTE:</u></b> On request the full signal can be adjustable for other filling levels as well. For signaling of the full signal a beacon or a siren can be switched additionally. Optional a potential-free contact can be assigned to the full signal as well, on which external devices can be connected.</p>	<p>limit switch with cam disk and circular forming plate</p> <p>beacon</p> <p>various electrical components</p>
<p>40401847</p> 	<p><b><u>100 % full signal via limit switch</u></b></p> <p>Through an electrical signal, which will be caused by a limit switch, a lamp on the control cabinet flashes. This signalled that the container is at 100% full.</p> <p><b><u>PLEASE NOTE:</u></b> On request the full signal can be adjustable for other filling levels as well. For signaling of the full signal a beacon or a siren can be switched additionally. Optional a potential-free contact can be assigned to the full signal as well, on which external devices can be connected.</p>	<p>limit switch with cam disk and circular forming plate</p> <p>beacon</p> <p>various electrical components</p>

EDV-Code	Description	Scope of delivery
40401425	<p><b><u>Automatic lubrication system PERMA</u></b></p> <p>Greasing dispenser for the automatic regularly greasing of the cranked and pendulum arm bearings.</p>	<p>4 pcs. PERMA - greasing dispenser</p> <p>4 pcs. Protective housing</p>
<p>40401444</p> 	<p><b><u>Central lubrication system</u></b></p> <p>With this electrical driven central lubrication system all the six greasing points of the machine will be greased automatically.</p> <p>This system is connected to the electrical control system of the Roll-Packer and can be programmed freely.</p>	<p>programmable lubricant pump</p> <p>mounting for pump</p> <p>lubricant conductions</p> <p>grease nipple</p> <p>fittings</p>
<p>40401497</p>  	<p><b><u>Manual single-point lubrication system</u></b></p> <p>This equipment facilitates the lubrication of the bearing between the cranked and the pendulum arm because otherwise this point is difficult to access.</p> <p>Two lubricant conductions will be mounted on the greasing point and conducted up to the stem. From there the greasing via a lubrication gun can take place.</p>	<p>lubricant conductions</p> <p>grease nipple</p> <p>mounting for central lubrication point</p> <p>fittings</p>



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